APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,599	01/18/2002	Christopher Cifra	5150-58400	1118

			EXAMINER
35690	7590	09/13/2005	VON BUHR, MARIA N

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ART UNIT	PAPER NUMBER
2125	

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/051,599	CIFRA ET AL.
	Examiner	Art Unit
	Maria N. Von Buhr	2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>18 Jan. 2002, 06 May 2002 & 28 Oct. 2002</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-58</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-58</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>06 May 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10282002</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-58 are pending in this application.

2.   Examiner acknowledges receipt of Applicant's information disclosure statement, received 28 October 2002, with accompanying reference copies. This submission is in compliance with the provisions of 37 CFR §1.97. Accordingly, it has been taken into consideration for this Office action.

3.   Examiner acknowledges receipt of Applicant's formal drawings. These drawings are acceptable.

4.   Applicant has incorporated by reference six co-pending applications, at pages 8-9 of the specification. Examiner notes that incorporation by reference of an application in a printed United States patent constitutes a special circumstance under 35 U.S.C. §122 warranting that access of the original disclosure of the application be granted. The incorporation by reference will be interpreted as a waiver of confidentiality of only the original disclosure as filed, and not the entire application file, In re Gallo, 231 USPQ 496 (Comm'r Pat. 1986). If Applicant objects to access to the entire application file, two copies of the information incorporated by reference must be submitted along with the objection. Failure to provide the material within the period provided will result in the entire application (including prosecution) being made available to petitioner. The Office will not attempt to separate the noted materials from the remainder of the application. Compare In re Marsh Engineering Co., 1913 C.D. 183 (Comm'r Pat. 1913).

5.   The specification is objected to, because the status of each of the referenced co-pending applications, at pages 8-9 of the specification, requires updating.

6.   35 U.S.C. §101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7.   Claims 54 and 55 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. See MPEP §2106(IV), wherein computer related non-statutory subject matter is defined. In this case, the instant claims are directed to a memory medium comprising program instructions, per se, without any recitation of computer execution of the program instructions. Hence, since a program is merely a set of instructions capable of being executed by a computer, the program itself is not a process and, without the medium on which it is stored being computer-readable, and/or without the computer for performing the execution, the program's functionality cannot be achieved. Accordingly, the program instructions on the memory medium are deemed to be non-statutory descriptive material.

8.   The following is a quotation of the second paragraph of 35 U.S.C. §112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which Applicant regards as his invention.

9.   Claims 4-6, 17, 19, 21, 31 and 38 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

In claims 4 and 31, the metes and bounds are not clear, because the negative limitation provides no limits for what "the information" does comprise. This negative language encompasses any and all possibilities, which necessarily has no metes and bounds.

In claim 5, it is unclear how accessing "the information representing the sequence of operations" can result in a determination of "program instructions corresponding to operations in the sequence," since there is no functional antecedence for any correspondence existing between "program instructions" and "operations in the sequence."

In claim 6, it is unclear how "invoking execution of the specified sequence of operations" can result in "executing software routines corresponding to operations in the sequence," since there is no functional antecedence for any correspondence existing between "software routines" and "operations in the sequence." Furthermore, there is no clear and proper antecedent basis for "said executing," since it is unclear which "executing" is being referred to (i.e.; "execution of the specified sequence of operations" or "executing software routines").

In claims 17 and 38, the metes and bounds are not clear, because the negative limitation provides no limits for what "receiving user input ... to specify the sequence of operations" does comprise. This negative language encompasses any and all possibilities, which necessarily has no metes and bounds.

In claim 19, the metes and bounds are not clear, because the negative limitation provides no limits for what "receiving user input ... for configuring one or more of the operations in the sequence" does comprise. This negative language encompasses any and all possibilities, which necessarily has no metes and bounds.

In claim 21, the first occurrence of any abbreviation/acronym within the claim language must be accompanied by its definition. In this case, "DAQ" has not been defined within the claim language.

10.   Applicant is advised that should claim 7 be found allowable, claim 43 will be objected to under 37 CFR §1.75 as being a substantial duplicate thereof. Applicant is further advised that should claim 23 be

found allowable, claim 28 will be objected to under 37 CFR §1.75 as being a substantial duplicate thereof. Applicant is further advised that should claim 33 be found allowable, claim 45 will be objected to under 37 CFR §1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP §706.03(k).

11.   The non-statutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR §1.321(c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR §1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR §3.73(b).

12.   Claims 1-7, 10-14, 17-20, 43, 44, 49, 51, 52, 54, 56 and 57 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-6, 10-13, 23-27, 29-32, 35-40, 42 and 44 of co-pending Application Serial No. 10/051,474 (U.S. Patent Application Publication No. 2002/0191023). This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced co-pending application and would be covered by any patent granted on that co-pending application since the referenced co-pending application and the instant application are claiming common subject matter, as follows: claims 1-6, 10-13, 23-27, 29-32, 35-40, 42 and 44 of co-pending Application Serial No. 10/051,474 contain every element of claims 1-7, 10-14, 17-20, 43, 44, 49, 51, 52, 54, 56 and 57 of the instant application and, as such, anticipate claims 1-7, 10-14, 17-20, 43, 44, 49, 51, 52, 54, 56 and 57 of the instant application.

Furthermore, there is no apparent reason why Applicant would be prevented from presenting claims corresponding to those of the instant application in the other co-pending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP §804.

13. Claims 1-7, 10-14, 17-33, 36-46 and 49-58 are provisionally rejected under the judicially created doctrine of double patenting over claims 1, 2, 4-11, 28, 30-35 and 37-44 of co-pending Application Serial No. 10/051,442 (U.S. Patent Application Publication No. 2002/0126151). This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced co-pending application and would be covered by any patent granted on that co-pending application since the referenced co-pending application and the instant application are claiming common subject matter, as follows: claims 1, 2, 4-11, 28, 30-35 and 37-44 of co-pending Application Serial No. 10/051,442 contain every element of claims 1-7, 10-14, 17-33, 36-46 and 49-58 of the instant application and, as such, anticipate claims 1-7, 10-14, 17-33, 36-46 and 49-58 of the instant application.

Furthermore, there is no apparent reason why Applicant would be prevented from presenting claims corresponding to those of the instant application in the other co-pending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP §804.

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-58 are rejected under 35 U.S.C. §102(b) as being clearly anticipated by Kodosky et al. (U.S. Patent No. 6,173,438; newly cited); which discloses an "embedded graphical programming system," including a "host computer and an embedded system or device, wherein graphical programs created using the computer system can be downloaded to the embedded system for execution in a real-time or more deterministic manner. The present invention thus provides a method for automatically generating an embedded application in response to a graphical program created by a user. This provides the user the ability to develop or define instrument functionality using graphical programming techniques, while enabling the resulting program to operate in an embedded real-time system. The invention includes a novel method for configuring the embedded system ... The host LabVIEW can also act as an independent application communicating with embedded LabVIEW through the shared memory. The host graphical programming system further provides a seamless environment in which the user can develop an embedded application using high level graphical programming techniques" (the abstract). See also, at least, Fig. 6, with associated text; col. 2, line 17 - col. 5, line 67; col. 8, lines 31-36; col. 9, line 24 - col. 10, line 19; col. 11, lines 24-39; col. 13, lines 10-51; col. 14, line 58 - col. 18, line 21.

16.   Claims 1-58 are rejected under 35 U.S.C. §102(b) as being clearly anticipated by the "Compumotor, Motion Builder Start-Up Guide & Tutorial" (cited by Applicant).

As per claims 1, 2, 7-9, 14, 43, 44, 47, 48, 52, 54, 56 and 57, the Compumotor Tutorial discloses a computer-implemented method for creating a control sequence (page 2, lines 2-5). The Compumotor Tutorial discloses displaying a graphical user interface that provides graphical user interface access to a set of control operations and receiving user input to the graphical user interface specifying the sequence of control operations (page 1, lines 2-9). The Compumotor Tutorial discloses automatically generating a graphical program implementing the specified sequence of control operations (page 87), wherein it is clear that the sequence of actions created represents a program that is automatically generated representing the functions, the user specifies a sequence but the icons represent functions and other program features such as if-then statements, wherein with user manipulation a graphical program is automatically generated. The Compumotor Tutorial also discloses performing the specified sequence of control operations (page 8, lines 6-8). The Compumotor Tutorial further discloses receiving a request from a computer program to execute the sequence of control operations, wherein the computer program was not used to create the sequence of control operations and executing the specified sequence of control operations in response to the request (pages 90 and 91), wherein the computer program is the controller to which the operations are downloaded for the execution of the specified sequence of control operations, and wherein the sequence of operations were not created in this controller.

As per claims 3, 5, 49 and 51, the Compumotor Tutorial further discloses storing information representing the specified sequence of control operations in a data structure in response to receiving user input specifying the sequence of control operations (page 6, lines 5-6), wherein the flowchart represents a data structure.

As per claim 4, the Compumotor Tutorial discloses that the information does not comprise programming language code (page 6, lines 1-3), wherein the information is represented as icons and not programming language code.

As per claim 6, the Compumotor Tutorial discloses receiving user input to the graphical user interface specifying parameter values for one or more control operations in the sequence (page 6, lines 7-8). The Compumotor Tutorial also discloses storing the parameter values and executing software routines corresponding to control operations in the sequence (page 8, lines 19-25), wherein the parameter information is stored in the program files. The Compumotor Tutorial also discloses passing the parameter values to the software routines for execution (page 80, lines 11-16), wherein this example discloses how parameters are stored and used for functions during execution.

As per claim 10, the Compumotor Tutorial discloses automatically generating a graphical program implementing the specified sequence of control operations includes programmatically generating a graphical program operable to perform the specified sequence of control operations and wherein performing the specified sequence comprises executing the graphical program to perform the specified sequence of control operations (page 6, lines 2-6 and page 8, lines 6-8).

As per claim 11, the Compumotor Tutorial discloses that the graphical program comprises a plurality of interconnected nodes that visually indicate functionality of the graphical program, as seen in the top figure of page 87.

As per claim 12, the Compumotor Tutorial discloses that the graphical program comprises a graphical data flow program, as seen in the top figure of page 87.

As per claim 13, the Compumotor Tutorial discloses generating a program implementing the specified sequence of control operations includes programmatically generating a text-based program operable to perform the specified sequence of control operations and executing the text-based program to perform the specified sequence of control operations (page 90, lines 16-18, the "Download" window, and page 91, lines 1-2).

As per claims 15 and 16, it is extremely well-known in the art for programs to be run in either synchronous or asynchronous modes, based upon such design constraints as processing speed, communication bandwidth, memory capacity, etc,. Such a characteristic is deemed to be inherent to the complex, multi-processor system disclosed in the Compumotor Tutorial.

As per claim 17, the Compumotor Tutorial discloses specifying a sequence of control operations does not include receiving user input specifying programming language code to implement the sequence of control operations (page 2, lines 2-5), wherein user input specifies icons and not programming language code.

As per claims 18 and 19, the Compumotor Tutorial discloses receiving user input to the graphical user interface for configuring one or more of the control operations in the sequence and for each control operation, configuring the control operation affects the control which the operation is operable to perform, wherein configuring the parameters of the control operations affects the performance of the control as shown in the condition statement variables shown, and wherein configuring one or more of the control operations in the sequence does not include receiving user input specifying programming language code to configure the control operations (page 79, lines 1-11).